

AMENDMENTS TO THE CLAIMS

1. (currently amended) An arrangement ~~Arrangement~~ for measurement demodulation and modulation error measurement of a digitally modulated receive signal, with a receive filter $[(1)]$, a following demodulator $[(2)]$ for error compensation and for determining $[[the]]$ ideal symbol samples, in which arrangement $[[the]]$ measuring signals are output from the demodulator,

wherein a first measuring signal ~~that~~ is filtered in a reference filter $[(13)]$ and a second measuring signal is filtered using a weighting filtered function, the first measuring signal and the second measuring signal are then $[[is]]$ evaluated in a following evaluation circuit, and ~~(4, 5), characterised in that~~

wherein the second measuring signal ~~the output signal of the demodulator $[(2)]$ is filtered in~~ ~~is fed via~~ a measuring filter ~~(12) to the evaluation circuit (4, 5) and the weighting filter function is formed by $[[the]]$ cascaded filter functions of the receive filter and the measuring filter (1, 12).~~

2. (currently amended) The arrangement ~~Arrangement~~ according to Claim 1, ~~characterised in that~~ wherein the weighting filtering function is determined by the convolution operation relationship $\text{weighting filter} = \text{receive filter} * \text{measuring filter}$.

3. (currently amended) The arrangement ~~Arrangement~~ according to Claim 1, ~~characterised in that~~ wherein the receive filter $[(1)]$

is designed according to the requirements of the demodulator ~~[[2]]~~ for ~~[[the]]~~ supplied signal characteristics.

4. (currently amended) ~~The arrangement~~ ~~Arrangement~~ according to Claim 3, ~~characterised in that~~ wherein the receive filter ~~[[1]]~~ is designed so that ISI-free samples are fed to the demodulator ~~[[2]]~~.

5. (new) An arrangement for measurement demodulation and modulation error measurement of a digitally modulated signal, the arrangement comprising:

a receive filter for receiving the digitally modulated signal and for filtering the digitally modulated signal;

a demodulator for receiving the filtered digitally modulated signal from the receive filter, for performing error correction to the received filtered digitally modulated signal, and for determining ideal symbol samples from the error corrected digitally modulated signal and outputting a measuring signal;

a reference filter for receiving the measuring signal from the demodulator and for filtering the measuring signal in a reference signal;

a measuring filter for receiving the measuring signal from the demodulator and for weighting the measuring signal of the demodulator; and

an evaluation circuit for evaluating the measuring signal of the reference filter and the weighting filtered signal of the measuring filter,

wherein the weighting filter function for the measuring signal of the demodulator is formed by cascaded filter functions of the receive filter and the measuring filter.

6. (new) The arrangement according to claim 5, wherein the weighting filtering function is determined by the convolution operation relationship: weighting filtering = receive filter * measuring filter.

7. (new) The arrangement according to claim 5, wherein the receive filter is designed according to requirements of the demodulator for supplied signal characteristics.

8. (new) The arrangement according to claim 7, wherein the receive filter is designed so that ISI-free samples are fed to the demodulator.

9. (new) The arrangement according to claim 5, wherein the measuring filter and the reference filter receive the measuring signal directly from the demodulator.

10. (new) A method for measurement demodulation and modulation error measurement of a digitally modulated signal, the method comprising the steps of:

receiving the digitally modulated signal;
filtering the digitally modulated signal by a receive filter;

providing the filtered digitally modulated signal to a demodulator;

performing, by the demodulator, error correction to the filtered digitally modulated signal and outputting a measuring signal;

filtering the measuring signal in a reference signal by a reference filter, which receives the measuring signal from the demodulator;

weighting the measuring signal output from the demodulator by a measuring filter; and

evaluating the measuring signal of the reference filter and the weighting filtered signal of the measuring filter by an evaluation circuit,

wherein the weighting filter function for the measuring signal for the demodulator is formed by cascaded filter functions of the receive filter and the measuring filter.